

AMENDED CLAIM SET

1. (currently amended) An engine control system, comprising:
  - a NOx catalyst containing ammonia as a reducing agent, provided in an exhaust system of an internal combustion engine, and selectively reducing NOx from exhaust gases;
  - a reducing agent supply providing the reducing agent to the exhaust system and positioned upstream of the NOx catalyst;
  - a NOx sensor detecting an amount of NOx in the exhaust gases emitted by the internal combustion engine;
  - a fuel injection system injecting fuel to the internal combustion engine in one of a main injection mode performing a main injection and ~~or~~ a pilot-and-main injection mode performing a pilot injection and the main injection, the pilot injection proceeding the main injection; and
  - a control unit activating the fuel injection system in the pilot-and-main injection mode to increase a NO<sub>2</sub>/NOx ratio in the exhaust gases when a NOx purifying efficiency ( $\eta$ ) ~~determined on the basis of data emitted NOx~~ is equal to or below a preset NOx purifying efficiency ( $\eta_L$ ).
2. (currently amended) The engine control system according to claim 1, further comprising: ~~including~~

\_\_\_\_\_ a catalyst temperature sensor detecting a temperature of the NOx catalyst,

\_\_\_\_\_ wherein the control unit activates the fuel injection system in the pilot-and-main injection mode in order to increase the NO<sub>2</sub>/NOx ratio in the exhaust gases when NOx purifying efficiency is equal to or below the preset purifying efficiency and when the temperature detected by the catalyst temperature sensor is below a catalyst activating temperature.